

SEQUENCE LISTING

<110> Keizo Inoue

Hiroyuki Arai

<120> An animal with a knocked out α -tocopherol transfer protein gene

<130> PH-1014-PCT

<150> JP P1999-237003

<151> 1999-08-24

<160> 7

<170> PatentIn Ver. 2.0

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<212> DNA

<213> Mus musculus

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<221> CDS

<222> (1).. (834)

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ctg ccc gac cac tcg ccg ctg ctc cag ccc ggc ctg gcg gag ctc agg	96
Leu Pro Asp His Ser Pro Leu Leu Gln Pro Gly Leu Ala Glu Leu Arg	
20 25 30	
cgc cgg gtg cag gag gca ggc gtc ccg cag acc ccg cag cct ctc aca	144
Arg Arg Val Gln Glu Ala Gly Val Pro Gln Thr Pro Gln Pro Leu Thr	
35 40 45	
gac gct ttc ctg ctg cgc ttc ctg cgc gcc cgg gat ttc gat ctg gat	192
Asp Ala Phe Leu Leu Arg Phe Leu Arg Ala Arg Asp Phe Asp Leu Asp	
50 55 60	
ctg gcc tgg cgc tta atg aaa aac tat tat aaa tgg cga gca gaa tgc	240
Leu Ala Trp Arg Leu Met Lys Asn Tyr Tyr Lys Trp Arg Ala Glu Cys	
65 70 75 80	
cca gaa tta agt gca gat cta cgc cct aga agt atc ctt gga ctt ctg	288
Pro Glu Leu Ser Ala Asp Leu Arg Pro Arg Ser Ile Leu Gly Leu Leu	
85 90 95	
aaa gct ggc tac cat ggc gtg ctc agg tcc cgg gat tct act ggc agt	336
Lys Ala Gly Tyr His Gly Val Leu Arg Ser Arg Asp Ser Thr Gly Ser	
100 105 110	
aga gtt ctc att tac aga att gca tac tgg gac cca aaa gtt ttt aca	384
Arg Val Leu Ile Tyr Arg Ile Ala Tyr Trp Asp Pro Lys Val Phe Thr	
115 120 125	
gct tat gat gta ttt cgt gta agt ctg atc aca tca gag ctc att gta	432
Ala Tyr Asp Val Phe Arg Val Ser Leu Ile Thr Ser Glu Leu Ile Val	

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cag gag gtg gaa act caa cgc aat gga gtt aaa gct ata ttt gac ctg			480
Gln Glu Val Glu Thr Gln Arg Asn Gly Val Lys Ala Ile Phe Asp Leu			
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gaa ggc tgg cag gtt tct cat gct ttc caa att acc cca tct gta gcc			528
Glu Gly Trp Gln Val Ser His Ala Phe Gln Ile Thr Pro Ser Val Ala			
	165	170	175
aag aag att gct gct gta ctt aca gat tcc ttt cca ctg aaa gtt cgt			576
Lys Lys Ile Ala Ala Val Leu Thr Asp Ser Phe Pro Leu Lys Val Arg			
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ggg atc cat ttg ata aat gag cca gtc att ttc cat gct gtc ttc tcc			624
Gly Ile His Leu Ile Asn Glu Pro Val Ile Phe His Ala Val Phe Ser			
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atg att aaa cca ttt ctg act gaa aag att aag gac cgg att cat ctg			672
Met Ile Lys Pro Phe Leu Thr Glu Lys Ile Lys Asp Arg Ile His Leu			
	210	215	220
cac ggg aac aac tac aaa tca agc atg ctt cag cac ttc cca gac att			720
His Gly Asn Asn Tyr Lys Ser Ser Met Leu Gln His Phe Pro Asp Ile			
	225	230	235
ctt cct cgg gaa tat ggc ggt aaa gag ttc tcc atg gag gat att tgt			768
Leu Pro Arg Glu Tyr Gly Gly Lys Glu Phe Ser Met Glu Asp Ile Cys			
	245	250	255

cag gag tgg aca aat ttt ata atg aag tct gaa gat tat ctc agc agc 816
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 260 265 270

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<213> Mus musculus

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 35 40 45

Asp Ala Phe Leu Leu Arg Phe Leu Arg Ala Arg Asp Phe Asp Leu Asp
 50 55 60

Leu Ala Trp Arg Leu Met Lys Asn Tyr Tyr Lys Trp Arg Ala Glu Cys
 65 70 75 80

Pro Glu Leu Ser Ala Asp Leu Arg Pro Arg Ser Ile Leu Gly Leu Leu
 85 90 95

Lys Ala Gly Tyr His Gly Val Leu Arg Ser Arg Asp Ser Thr Gly Ser
 100 105 110

Arg Val Leu Ile Tyr Arg Ile Ala Tyr Trp Asp Pro Lys Val Phe Thr
 115 120 125

Ala Tyr Asp Val Phe Arg Val Ser Leu Ile Thr Ser Glu Leu Ile Val
 130 135 140

Gln Glu Val Glu Thr Gln Arg Asn Gly Val Lys Ala Ile Phe Asp Leu
 145 150 155 160

Glu Gly Trp Gln Val Ser His Ala Phe Gln Ile Thr Pro Ser Val Ala
 165 170 175

Lys Lys Ile Ala Ala Val Leu Thr Asp Ser Phe Pro Leu Lys Val Arg
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Gly Ile His Leu Ile Asn Glu Pro Val Ile Phe His Ala Val Phe Ser
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Met Ile Lys Pro Phe Leu Thr Glu Lys Ile Lys Asp Arg Ile His Leu
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His Gly Asn Asn Tyr Lys Ser Ser Met Leu Gln His Phe Pro Asp Ile
 225 230 235 240

Leu Pro Arg Glu Tyr Gly Gly Lys Glu Phe Ser Met Glu Asp Ile Cys
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acaccatgga ggagatttac ctctgctcct ttacttcca gccacacaa aaatgaaaaa 180

cgcttccaag gcaagagttc tgttttgagg atatcctcaa taatcggaac atggtctcta 240

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<213> Mus musculus

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20

25

30

Arg Arg Val Gln Glu Ala Gly Val Pro Gln Thr Pro Gln Pro Leu Thr

35

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45

Asp Ala Phe Leu Leu Arg Phe Leu Arg Ala Arg Asp Phe Asp Leu Asp

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Leu Ala Trp Arg

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<210> 5

<211> 28

<212> DNA

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